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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,122	08/21/2000	Robert G. Arsenaull	PD-990273	9860

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THE DIRECTV GROUP INC
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EXAMINER

HOYE, MICHAEL W

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/643,122

Applicant(s)

ARSENAULT ET AL

Examiner

Michael W. Hoye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Response to the Office Action Dated November 10, 2003 (Amendment A), filed March 15, 2004, with respect to the rejection of newly amended independent claims 1, 10 and 19 under 35 U.S.C. 103(a) as being unpatentable over Yoshinobu et al (USPN 5,686,954) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yoshinobu et al, in further view of Lee et al (USPN 6,463,428).

Regarding amended independent claims 1, 10 and 19, the Applicants state that, "the pending claims now recite generating a keyword table and populating the keyword table with words by examining the program guide data and entering into the keyword table words that appear in the program guide data more than a particular number of times." The Applicants argue that, "Nothing in Yoshinobu remotely discloses or suggests that received program guide data could or should be examined to determine if words appear more than a particular number of times and, when words do occur more than a particular number of times in the program guide data, entering those words into a keyword table that is used to prepare a program guide for presentation of a display screen."

In response, the Examiner respectfully disagrees with the Applicants because of the teachings of the Yoshinobu reference as combined with the teachings of the Lee et al (USPN 6,463,428) reference, cited by the Examiner. Although the Yoshinobu reference does not seem to give explicit detail as to the claimed, "processor programmed to populate the keyword table

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with words by examining the program guide data and entering into the keyword table words that appear in the program guide data more than a particular number of times”, the Lee et al patent teaches extracting significant keywords from program guide data based on frequency of occurrence or a variation thereof, which makes the number of possible keywords easier to handle and easier to select. The titles, descriptions, or any other [program guide] data could be scanned and those terms that occur with some degree of frequency could be stored in a keyword list or table (see col. 4, line 63 – col. 5, line 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the Yoshinobu et al reference which discloses the use key word searches in program guide data with the teachings of the Lee et al reference the claimed generating a keyword table or list and populating the keyword table with words by examining the program guide data and entering into the keyword table words that appear in the program guide data more than a particular number of times for the advantage of finding keywords based on a more significant frequency of occurrence, which makes it more efficient to handle the number of keywords and also provides easier selection capability when using the program guide. One of ordinary skill in the art would have been led to make such a modification for the advantages described above.

Drawings

2. The proposed drawing corrections were received on 3/15/04. These proposed drawing corrections are acceptable.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-7, 9-12, 14-16, 18-21, 23-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinobu et al (USPN 5,686,954), in view of Lee et al (USPN 6,463,428), both cited by the Examiner.

As to claim 1, note the Yoshinobu et al reference which discloses a system for transmitting, receiving and displaying program guide data on a display screen. The claimed "program guide data" is met by program schedules or program information (see col. 2, line 40 – col. 3, line 25 and Figures 1A - 2). The claimed "plurality of segments" is met by items and identification data, which are associated with programs, and contained in packets (see col. 2, line 25 – col. 3, line 4 and col. 9, lines 35-63, and Figures 1A – 3). The claimed "some segments...having a keyword therein" is met by key words and text data (see col. 1, lines 57-58 and col. 12, lines 27-35). The claimed "transmitter" which receives program guide data and transmits the program guide data over a broadcast channel is met by transmitting the program data, which inherently includes the use of a transmitter (col. 4, lines 34-38, col. 13, lines 26-30 and col. 31, lines 43-55). The claimed "tuner tuned to the broadcast channel" and "adapted to receive program guide data..." is met by the program selector 72 in Fig. 10 (see col. 13, lines 45-51 and col. 14, lines 33-46). The claimed "memory" is met by RAM 104 and SRAM 105 in Fig. 10 and memory 112 in Fig. 14 (see col. 14, lines 14-19). The claimed "keyword table" is met by ID-corresponding list data stored in the memory section 112 in Fig. 14 (see col. 22, lines 33-53).

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The claimed “processor coupled to the tuner and memory” is met by CPU 102 in Fig. 10, which is coupled to the memory (RAM 104, SRAM 105 in Fig. 10 and memory section 112 in Fig. 14 – which are all a part of system control section 100) and tuner (program selector 72), where the processor or CPU 102/system control section 100 compares the item IDs of the program information to the ID-corresponding list data and determines what items have the IDs therein and extracts the list data corresponding to the IDs and converts the received text data of the ID-corresponding list data into display data comprising the character font data (see Figs. 14-17 and col. 21, line 55 – col. 23, line 23). Yoshinobu discloses transmitting or broadcasting program guide data to subscribers or receivers as described above. The Yoshinobu reference does not seem to give explicit detail as to the claimed, “processor programmed to populate the keyword table with words by examining the program guide data and entering into the keyword table words that appear in the program guide data more than a particular number of times”, the Lee et al patent teaches extracting significant keywords from program guide data based on frequency of occurrence or a variation thereof, which makes the number of possible keywords easier to handle and easier to select. The titles, descriptions, or any other [program guide] data could be scanned and those terms that occur with some degree of frequency could be stored in a keyword list or table (see col. 4, line 63 – col. 5, line 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the Yoshinobu et al reference which discloses the use key word searches in program guide data with the teachings of the Lee et al reference the claimed generating a keyword table or list and populating the keyword table with words by examining the program guide data and entering into the keyword table words that appear in the program guide data more than a particular number of times for the

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advantage of finding keywords based on a more significant frequency of occurrence, which makes it more efficient to handle the number of keywords and also provides easier selection capability when using the program guide. One of ordinary skill in the art would have been led to make such a modification for the advantages described above. In addition to, Yoshinobu does not explicitly disclose a “program guide database”. However, the examiner takes Official Notice that it is notoriously well known in the art of video distribution systems to use a program guide database that is coupled to a transmitter for the advantage of having a server that transmits program guide data to subscriber systems, in addition, most program guide systems have some sort of program guide database associated with the transmission of programming, such as video, audio or other data. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate a program guide database at the transmitter for the advantages given above.

As to claim 2, the Yoshinobu reference discloses the claimed “each program has an associated name” as met by Figures 18A-18C for example, where the user may select the kinds of items or “keywords” to be used as a search key such as title, starring (actor), guest starring, category, etc... In the example shown in Figures 18A-18C, category is selected and the more specific category of “Stock Market” is selected, then a search is performed wherein any programs with the “names of programs associated with the segments having the keyword therein” such as programs having the term “stock market” associated with the program are displayed on the display screen when the term “stock market” is selected (see col. 26, line 5 – col. 27, line 29). Other types of searches may be performed in a similar manner such as using “Title” and titles of programs for the keyword search.

As to claim 3, the Yoshinobu reference discloses displaying on the CRT display 75 (Fig. 9) a program associated with a name from the list of names of programs wherein the name of that program is selected from the list of names of programs (see col. 22, lines 54-57).

As to claim 5, the Yoshinobu reference discloses displaying the keyword or words in a highlighted fashion by hatching or displaying a different color scheme around the region of the display in which the keyword or words are located, see Fig. 19B for example, where the name of the artist selected (Deep Purple) is highlighted or shaded.

As to claim 6, the Yoshinobu reference discloses that it is possible to search programs by using a performer or name of an actor as a search key or "keyword" (see col. 6, lines 11-16).

As to claim 7, the Yoshinobu reference discloses that it is possible to search programs by using a specific program category as a search key or "keyword" (see col. 6, lines 2-6).

As to claim 9, the Yoshinobu reference discloses sending a keyword table over a broadcast channel to the memory of the receiver as described above in claim 1 and in col. 1, lines 52-58, col. 3, lines 36-46 and col. 4, lines 25-38).

As to claims 10-12, 14-16 and 18, the claimed receiver is met by receiver 70 as shown in Fig. 10 of the Yoshinobu reference and the claims are rejected based on similar arguments made in the system claims 1-3, 5-7 and 9.

As to claims 19-21, 23-25 and 27, the claimed method is rejected based on similar arguments made in the system claims 1-3, 5-7 and 9.

5. Claims 4, 8, 13, 17, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinobu et al, in view of Lee et al, in further view of Maze et al (USPN 6,216,264), all cited by the Examiner.

As to claim 4, the Yoshinobu reference discloses the claimed “each program has associated program information” as shown in Figures 2-8 and specifically Figure 15). However, Yoshinobu does not explicitly disclose that the processor is further programmed to display program information associated with a program when the name of that program is selected from the list of names of programs. The Maze et al reference further discloses a processor that is further programmed to display program information associated with a program when the name of that program is selected from the list of names of programs as shown in Figure 3 where the program “Zulu” is selected from the list of names of programs and associated program information is displayed (see col. 3, lines 11-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the teachings of Yoshinobu which discloses a system for transmitting, receiving, and display program guide data on a display screen, with the additional teachings of Maze et al, which discloses displaying program information associated with a program when the name of that program is selected from the list of names of programs for the advantage of allowing a user to view additional information associated with a selected program. One of ordinary skill in the art would have been led to make such a modification since program guides that display additional information about a selected program are well known in the art and may further assist a user in determining what programming he or she would like to watch, record, or set a reminder for.

As to claim 8, the Yoshinobu reference discloses using the names of performers or actors in a program or category as a search key or "keyword" as described above in claims 6 and 7. However, Yoshinobu does not explicitly disclose that the keyword comprises a name of a director of a program. The Maze et al reference discloses that the search criteria or "keyword" may comprise a text string, which may relate to the name of a director of a program (see col. 1, lines 45-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the teachings of Yoshinobu which discloses using the name of an actor or performer and a category as a search key or "keyword" with the additional teaching of Maze et al, which discloses the name of a director may be used as a search term or "keyword" for the advantage of allowing a user to find programming related to a specific director of interest to the user. One of ordinary skill in the art would have been led to make such a modification since having additional keyword search features, such as, a director's name, when searching program information would offer additional benefits to the users of the system by providing more extensive keyword search capabilities.

As to claims 13 and 17, the claimed receiver is met by receiver 70 as shown in Fig. 10 of the Yoshinobu reference and the claims are rejected based on similar arguments made in the system claims 4 and 8.

As to claims 22 and 26, the claimed method is rejected based on similar arguments made in the system claims 4 and 8.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

Any response to this action should be mailed to:

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Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to customer service whose telephone number is **(703) 308-HELP**.

Michael W. Hoyer
May 20, 2004


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600